Serial No. 10/720,858
Belkin et al.
Case No. CE10866R

**Amendments to the Claims:**

1. (Currently Amended) A method of preventing circular call forwarding loops for a communications unit capable of operating in a first network and a second network within a loosely coupled network, and respectively having a first network number and a second network number, as well as a first network voice mail, the method comprising:

receiving a call directed to the first network number of the communications unit;

adding first loop indicia to caller identification data in the call;

storing first identification data corresponding to the call upon determining that the communications unit is not operating in the first network;

forwarding the call to the second network number of the communications unit;

receiving another call having second identification data for the communications unit subsequent to the forwarding of a call to the second network number of the communications unit;

checking for other loop indicia corresponding to another call;

comparing the other loop indicia corresponding to the another call with the loop indicia added to the call and the second identification data with the first identification data; and

forwarding the call to the first network voice mail of the communications unit when the comparing the other loop indicia corresponding to the another call with the loop indicia added to the call and the second identification data with the first identification data indicates a call forwarding loop.

2

Serial No. 10/720,858
Belkin et al.
Case No. CE10866R

2.    (Original) The method of claim 1 wherein the storing the first identification data

comprises storing caller identification data for the call and the comparing comprises

comparing other caller identification data for the another call with the caller identification

data for the call and when a match is found indicating the call forwarding loop,

forwarding the call to the first network voice mail of the communications unit.

3.    (Cancelled)

4.    (Currently Amended) The method of claim [[3]] 1 wherein the first and the other

loop indicia comprises one of a prefix and a suffix for the caller identification data, the

prefix and suffix having a predetermined number sequence.

5.    (Original) The method of claim 1 wherein the storing the first identification data

comprises storing a tracked number of call appearances at the communications unit; the

comparing comprises incrementing the tracked number of call appearances and

determining when a predetermined limit for call appearances is satisfied; and when the

predetermined limit is satisfied indicating the call forwarding loop, forwarding the call to

the first network voice mail of the communications unit.

6.  (Currently Amended) A network switch, comprising:

        a switching mechanism for switching voice and data traffic and for connecting an

enterprise network to a cellular network through a publicly switched telephone network;

and

3

Serial No. 10/720,858
Belkin et al.
Case No. CE10866R

a controller in communications with the switching mechanism for setting up calls,

the controller including a processor and a controller memory that is programmed to

enable the processor:

to forward an enterprise call, which is directed to a communications device

enterprise number, to a corresponding communications device cellular number in the

cellular network; and

to associate calls with a call forwarding number either prior to, by

instructing the communications unit to manipulate forwarding information in the second

network to associate failed calls with the call forwarding number, concurrent with, or

subsequent to forwarding the enterprise call to the corresponding communications device

cellular number of a communications unit when the communications unit is not operating

in the enterprise network.


7.      (Original) The network switch of claim 6 wherein the call forwarding number

comprises an enterprise network voice mail number, whereby calls forwarded from the

cellular network are directed to the network voice mail for a communication unit.


8.      (Original) The network switch of claim 6 wherein the enterprise network

comprises a wireless local area network (WLAN) and the switching mechanism and the

controller respectively comprise a private branch exchange (PBX) gateway and a PBX

controller.


9.      (Currently Amended) The network switch of claim 6, wherein the associating

calls with a call forwarding number comprises associating calls with a call forwarding

4

Serial No. 10/720,858
Belkin et al.
Case No. CE10866R

~~number by~~ instructing the communications unit to manipulate forwarding information in

the second network to associate failed calls with the call forwarding number <u>comprises</u>

<u>instructing the communications unit to manipulate forwarding information in the second</u>

<u>network to associate failed calls with the call forwarding number</u> when the

communications unit enters the second network.

10. (Currently Amended) A network switch, comprising:

a switching mechanism for switching voice and data traffic and for connecting an

enterprise network to a cellular network through a publicly switched telephone network;

a controller in communication with the switching mechanism for setting up calls

for the switching mechanism, the controller including a processor and a controller

memory that is programmed to enable the processor:

to forward an enterprise call, which is directed to a communications unit

enterprise number, to a corresponding communications unit cellular number in the

cellular network;

<u>add first loop indicia to first identification data in the enterprise call</u>

to initially store first identification data corresponding to the enterprise

call,

<u>to check for other loop indicia corresponding to a subsequent call</u>

to compare <u>the other loop indicia and the</u> second identification data

corresponding to ~~a~~ <u>the</u> subsequent call received by the switching mechanism from the

cellular network with <u>and first loop indicia and</u> the first identification data, and

5

Serial No. 10/720,858
Belkin et al.
Case No. CE10866R

to forward the subsequent call to an enterprise network voice mail when

the other loop indicia compared to the first loop indicia and the second identification data

compared to the first identification data ~~indicates~~ indicate a call forwarding loop.

11. (Original) The network switch of claim 10 wherein the processor to store the first

identification data further is enabled to store caller identification data for the enterprise

call and to compare comprises comparing other caller identification data for the

subsequent call with the caller identification data for the enterprise call and when a match

is found indicating the call forwarding loop, forwarding the call to the enterprise network

voice mail of a communications unit.

12. (Cancelled)

13. (Currently Amended) The network switch of claim [[12]] 10 wherein the loop

indicia comprises one of a prefix and a suffix for the caller identification data, the prefix

and suffix having a predetermined number sequence.

14. (Original) The network switch of claim 10 wherein to store the first identification

data comprises to store a tracked number of call appearances at a communications unit; to

compare comprises incrementing the tracked number of call appearances and determining

when a predetermined limit for call appearances is satisfied; and when the predetermined

limit is satisfied indicating the call forwarding loop, forwarding the call to the first

network voice mail of the communications unit.

6

Serial No. 10/720,858
Belkin et al.
Case No. CE10866R

15. (Cancelled)

16. (Currently Amended) A method of preventing circular call forwarding loops for a

communications unit capable of operating in a first network and a second network within

a loosely coupled network, and having a first network number with the first network, a

second network number with the second network, and a first network voice mail, the

method comprising:

in the first network, associating calls to the communications unit with a call

forwarding number for the second network number of the communications unit by

providing the call forwarding number to the communications unit via the first network

while the communications unit is in the first network.

17. (Cancelled)

18. (Original) The method of claim 16, wherein the associating calls to the

communications unit with a call forwarding number for the second network number of

the communications unit comprises directly manipulating forwarding number

information, by the first network, in the second network via an interface between the first

network and the second network.

19. (Original) The method of claim 16, wherein the forwarding number for the second

network number of the communications unit comprises one of a number of the first

7

Serial No. 10/720,858
Belkin et al.
Case No. CE10866R

network voice mail, the first network number, and a marker number, the marker number

routed to the first network.

20. (Original) The method of claim 16, the method further comprising:

receiving in the first network, subsequent to the associating calls to the

communications unit with a call forwarding number for the second network number of

the communications unit, a call to the communications unit;

detecting that a predetermined call forwarding loop condition exists for the call;

and

forwarding the call to the first network voice mail when the predetermined call

forwarding loop condition exists.

21. (Original) The method of claim 16, wherein

the communications unit has a third network number with the first network and

the forwarding number for the second network number of the communications unit

comprises the third network number,

the method further comprising:

receiving in the first network, subsequent to the associating calls to the

communications unit, a call directed to the third network number; and

forwarding the call to the first network voice mail when the

communications unit is not operating in the first network, and

forwarding the call to the communications unit when the

communications unit is operating in the first network.

8

Serial No. 10/720,858
Belkin et al.
Case No. CE10866R

22. (Original) A communications unit having a first network number with a first network and a second network number with a second network, the communications unit configured for:

receiving, while operating in the first network, a forwarding number from the first network; and

manipulating, while the communications unit is operating in the second network, forwarding information in the second network to cause the second network to use the forwarding number for the communications unit.

23. (Original) The communications unit of claim 22, wherein:

the forwarding number is a conditional forwarding number; and

the manipulating forwarding information in the second network comprises setting conditional forwarding information for the second network number to the conditional forwarding number after initiation of operation in the second network.

24. (Original) The communications unit of claim 22, wherein:

the forwarding number is an unconditional forwarding number; and

the manipulating forwarding information in the second network comprises:

setting unconditional forwarding information for the second network number to the unconditional forwarding number prior to termination of operation in the second network; and

9

Serial No. 10/720,858
Belkin et al.
Case No. CE10866R

clearing the unconditional forwarding information for the second network

number after initiation of operation in the second network.

10